

Message

From: Woodbury, Lynn [woodburyl@cdmsmith.com]
Sent: 12/13/2019 10:35:25 PM
To: Partridge, Charles [Partridge.Charles@epa.gov]; OBrien, Wendy [OBrien.Wendy@epa.gov]; Wall, Dan [wall.dan@epa.gov]
CC: David Shanight [shanightdt@cdmsmith.com]; Greene, Nikia [Greene.Nikia@epa.gov]
Subject: More meconium info...
Attachments: 2002_Ostrea_meconium.pdf; 2013_Yang_Japan As-Cd-Pb.pdf; 2014_Hamzaoglu_colostrum-meconium.pdf; Summary table_12-13-19.xlsx

Flag: Follow up

Draft, Confidential

All –

As promised, here are three additional meconium papers for review. I've added these to the summary table (also attached). I also added 2019 Cassoulet and 1966 Popita (which were disseminated in earlier emails) to the table. New sources are displayed in green in the table. A few notes:

- The lead levels in the Turker et al. 2006 study are quite a bit different from all the others. However, this may reflect authentic contamination. I didn't attach a copy of this study because of copyright issues...I'm following up with our InfoCenter to confirm it is appropriate for me to share the article with my client. But, here is a brief excerpt regarding the study population:

Seventy-five of 500 important industrial establishments in Turkey are located in Kocaeli. The most important of these are petroleum refinery and fuel additives, PVC plastics, crystal glass production, dye, chemistry, drug, detergent, rubber, and automobile industry of Turkey. Leadfree oil is seldom used by people in Turkey. The aim of this study was to measure concentrations of toxic metals (Pb and Cd) and trace elements [zinc (Zn), copper (Cu), and iron (Fe)] in the meconium of newborns from the industrial city of Kocaeli. The parents of all infants had lived within a 20-km radius of a petroleum refinery or dye industry for at least 5 years.

- For the Yang and Ostrea citations, I haven't presented the actual values (yet) as both studies present results in units that will require conversion to display as ug/g. I believe both are expressing concentrations in terms of mass of metal in the extraction fluid (and not per mass of meconium). You can review the footnote for each study for details. Once I'm able to spend a bit more time with these two studies, I'll evaluate if they can provide useful data.

I'll continue chipping away at the lit search task and transmitting new information as it becomes available.

Have a great weekend,
Lynn

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